

No. 615,575.

Patented Dec. 6, 1898.

E. E. PRATT.
RAILWAY CAR.

(Application filed Aug. 25, 1898.)

(No Model.)

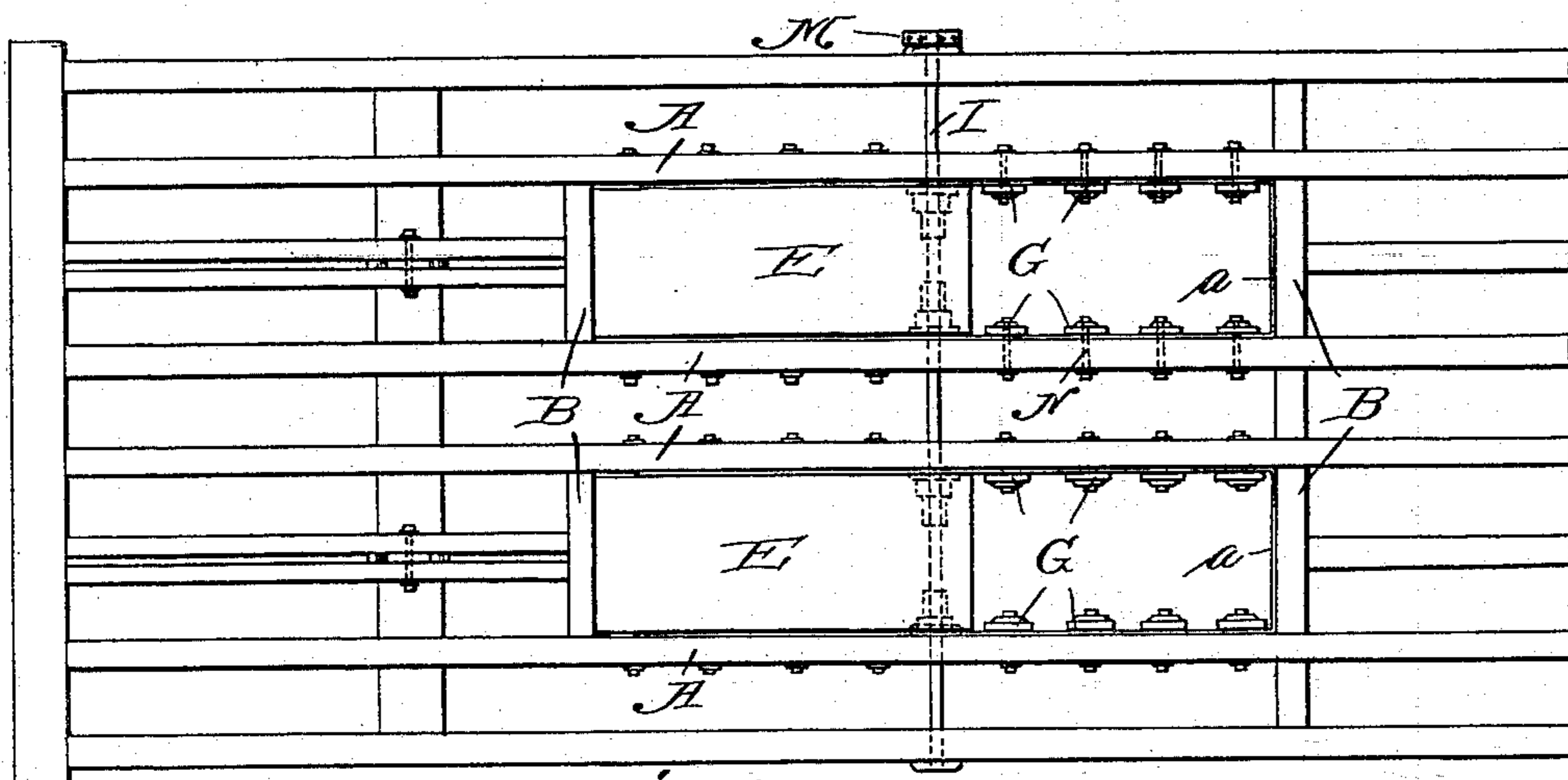


Fig. 1.

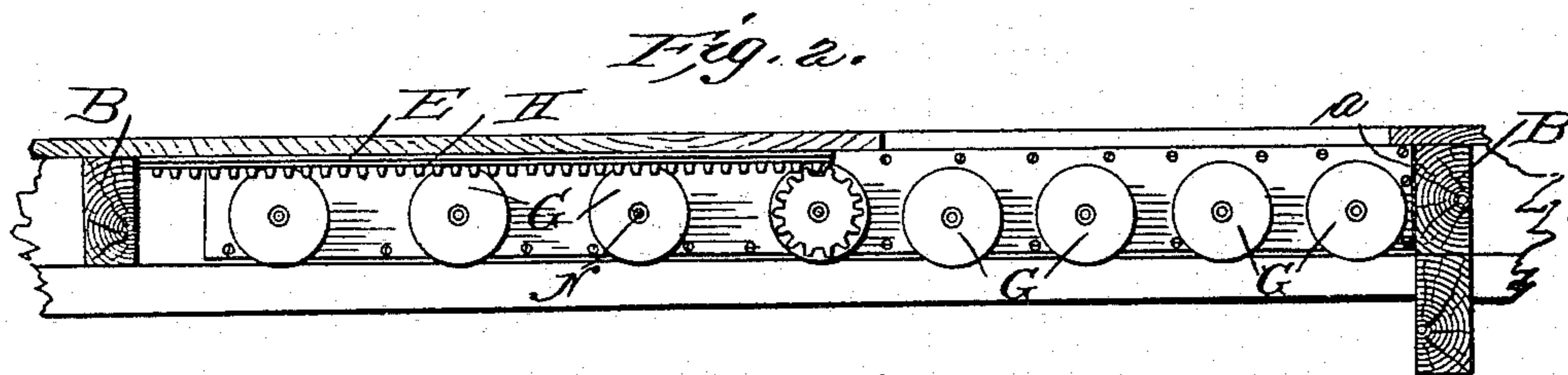


Fig. 2.

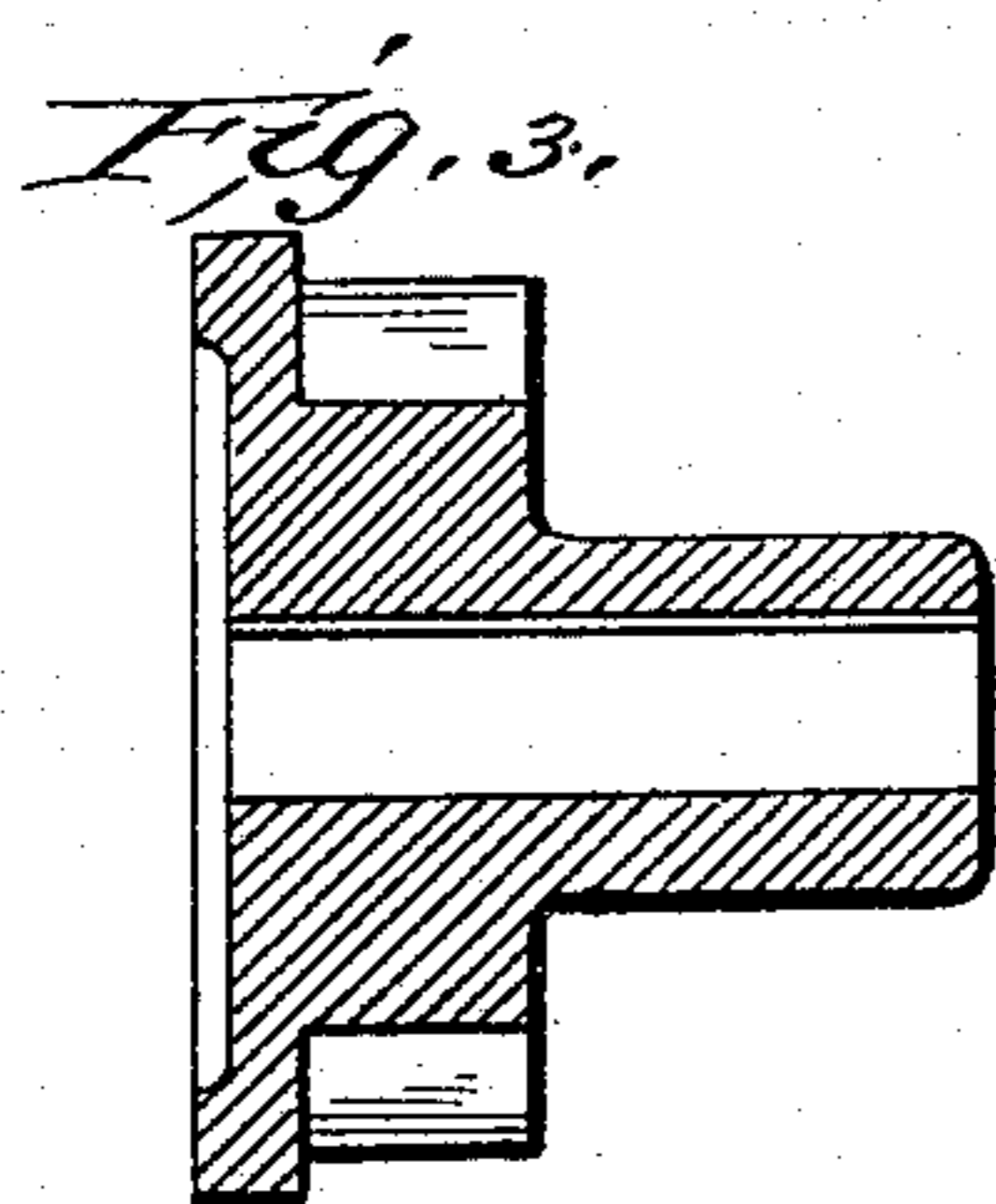


Fig. 3.

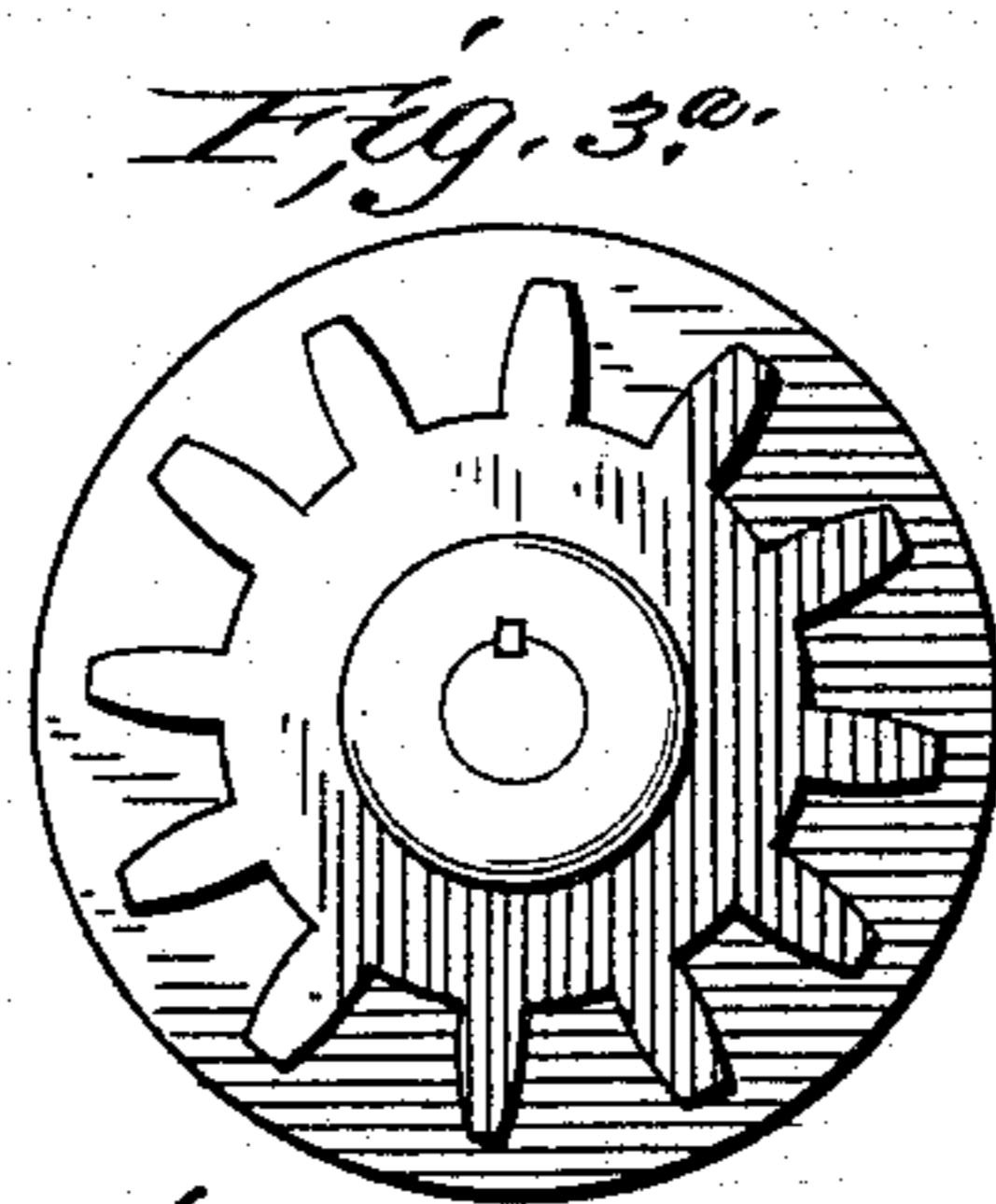


Fig. 3a.

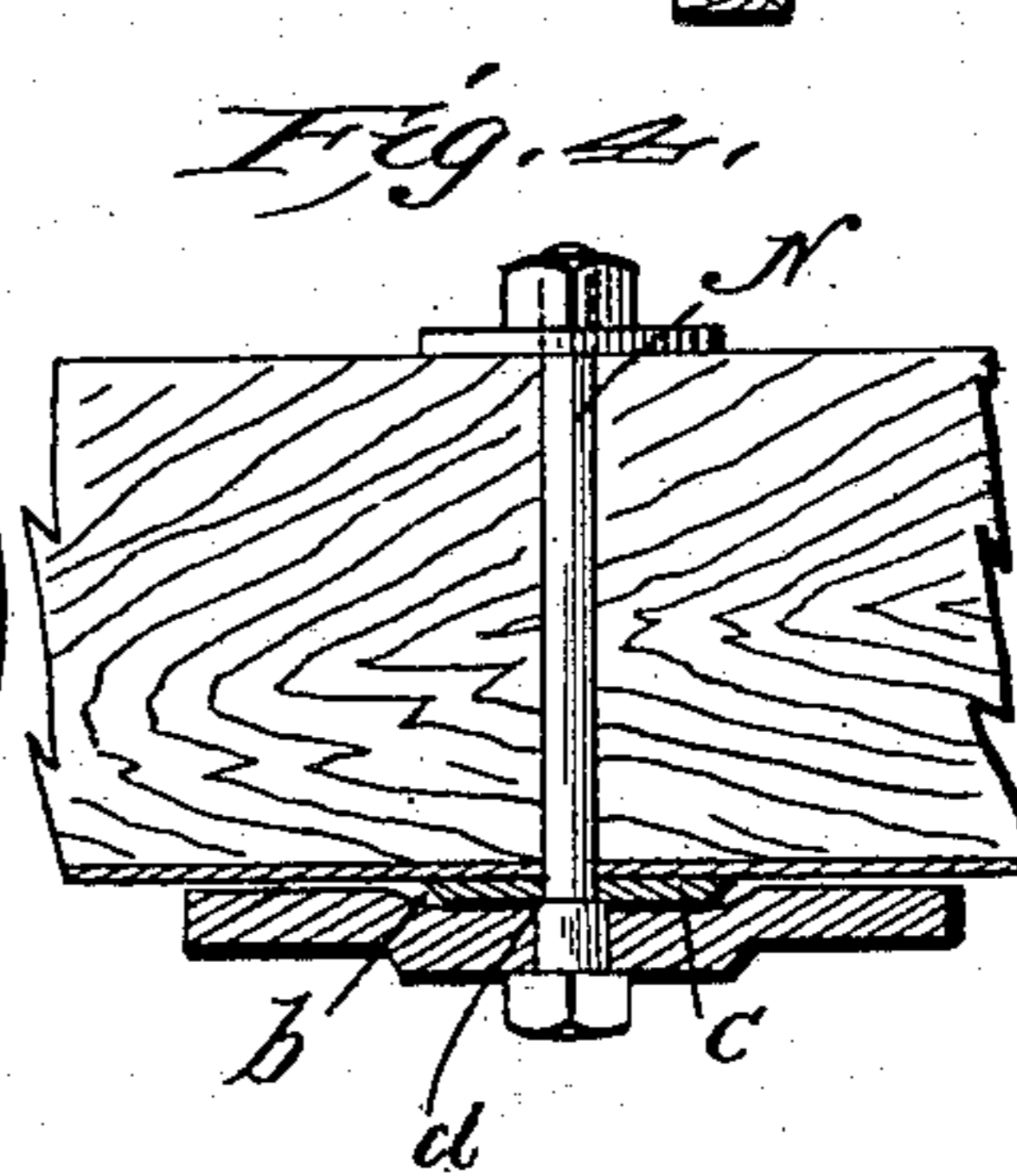


Fig. 4.

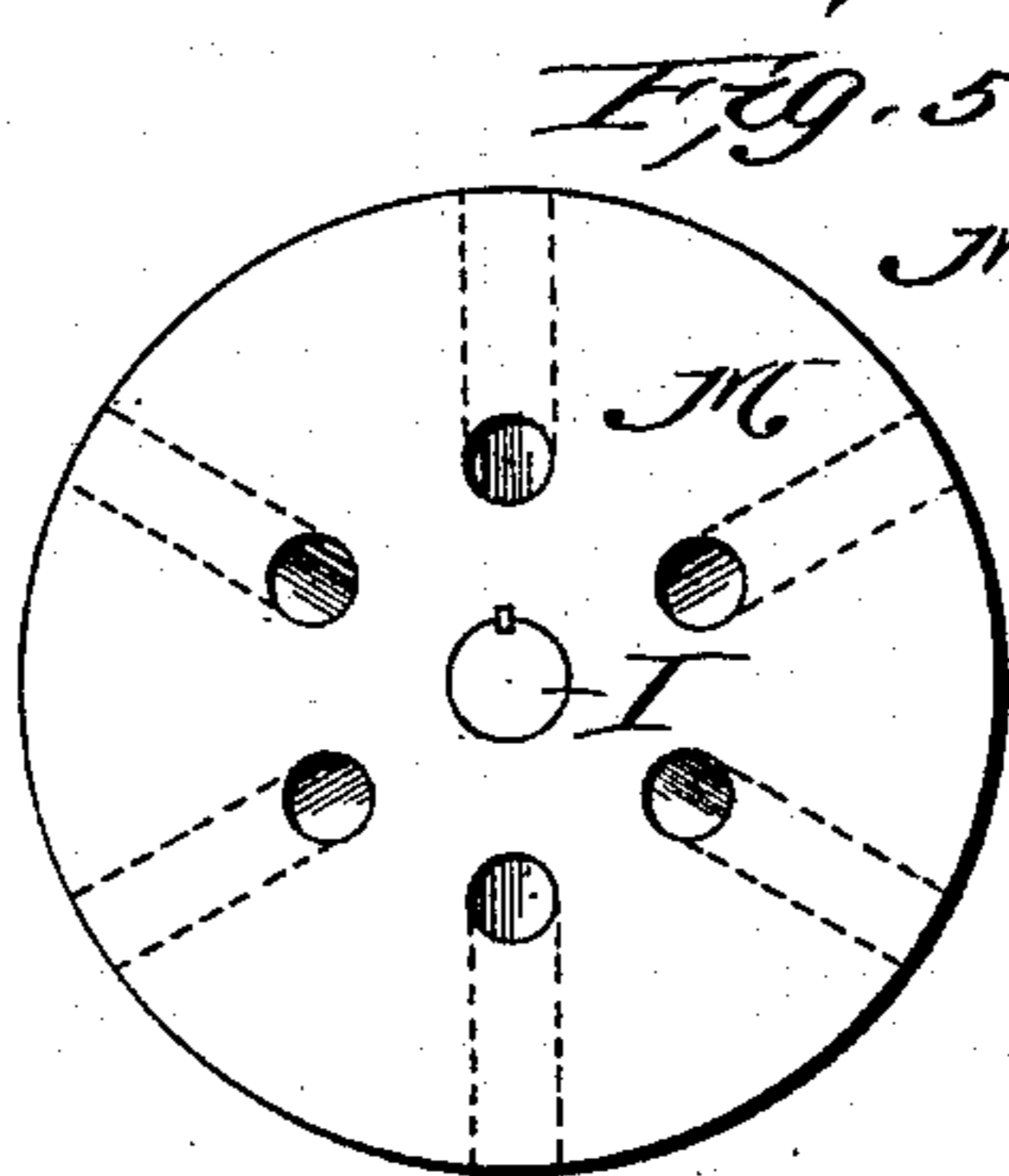
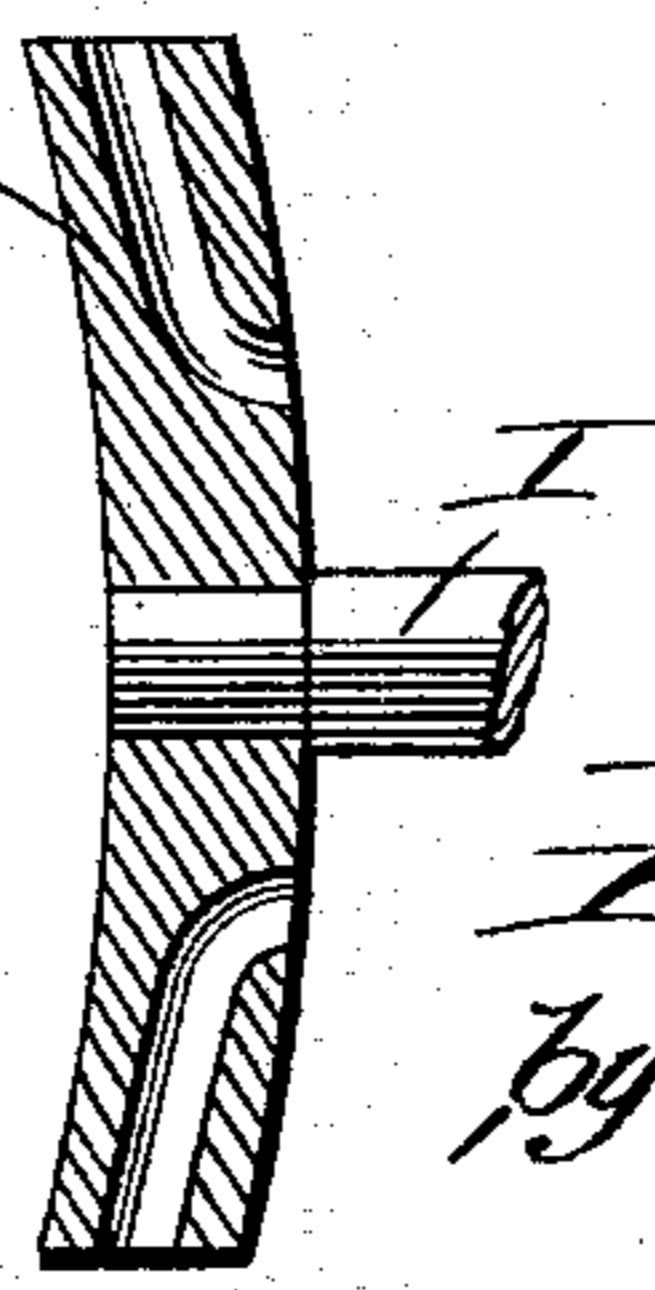


Fig. 5.



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RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 615,575, dated December 6, 1898.

Application filed August 25, 1898. Serial No. 689,497. (No model.)

To all whom it may concern:

Be it known that I, ELIAS E. PRATT, a citizen of the United States, residing at New Haven, Connecticut, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

My invention is an improvement upon that class of railway-cars of the gondola type, in which a sliding section is used in the bottom of the car to discharge its contents.

In the accompanying drawings, Figure 1 shows a plan view of the bottom of a car with two openings. Fig. 2 is a partial section showing the rack, pinion, and bearing-rollers. Fig. 3 is a detail view showing the pinion. Fig. 3^a is an end view of Fig. 3. Fig. 4 shows one of the bearing-rollers in section. Fig. 5 shows in section and elevation the lever-wheel.

I have shown two openings covered by sliding sections; but it will be understood that I do not limit myself as to number or size. I have deemed it sufficient to show the details relating to one sliding section, as the other section is identical in construction and operation.

The opening is made in the bottom of the car between two sills A A, cross-sills B strengthening the bottom at the ends of the openings. The sliding section E is preferably of steel and is supported by bearing on antifriction-rollers G, supported by bolts or studs N passing through the sills and secured by bolts, as shown in Fig. 4. The sill is preferably lined by a metal plate *a*, and to prevent the clogging of the wheels G, I dish or concave these wheels, as at *b*, Fig. 4, providing a collar *c*, adapted to receive the pressure of a shoulder *d* on the stud N, the wheel covering the collar and rotating freely on the end of the stud.

The steel slide has a rack H near each edge, and in order to give movement to the slide I provide a shaft I with a combined pinion and antifriction-wheel, (shown in detail in Figs. 3 and 3^a,) one of these being located at the position of and engaging the racks of the slide.

The shaft I is rotated by a lever-wheel M. (Shown in detail in Fig. 5.) The wheel is secured to the shaft I and is made slightly dished, as shown. From its periphery lever-pockets extend inwardly, curving to the outer face of

the wheel, so as to discharge any dust or dirt which would otherwise collect therein. The lever is inserted in these pockets and the shaft thus easily turned to move the slide E back and forth.

The construction of the wheel G prevents any foreign matter from wedging between it and the car, as the face of the wheel can be brought into close proximity to the adjacent part of the car.

The flange on the pinion prevents jamming of the gearing in case the body of the car is sprung out of line, thus insuring uniform working of the gearing.

The racks have a side flange alongside the teeth to bear upon the antifriction-rollers.

What I claim is—

1. In combination with a car-bottom, a sliding section, a rack secured near each edge of the section, a series of antifriction-wheels supporting the edges of the section and a combined pinion and antifriction-wheel for each rack, a shaft supporting the pinions and means for rotating the shaft, substantially as described.

2. In combination with a car-bottom, a movable slide and antifriction-wheels supporting the slide, said wheels being dished or concaved on the inner face, a stud supporting the same and a collar located in the dished part between the wheel and the adjacent part of the car, substantially as described.

3. In combination with a car-bottom, a movable slide having a rack, a pinion engaging the rack, a shaft and a lever-wheel on the shaft, said wheel having pockets in its periphery with open ends, substantially as described.

4. In combination with a car-bottom, a movable slide having racks, a series of antifriction-wheels supporting the slide a combined pinion and antifriction-wheel supporting and moving the slide and operating means, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ELIAS E. PRATT.

Witnesses:

ELIAS E. PRATT, Jr.,
SARAH V. PRATT.